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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,201	02/12/2002	Nicholas P. Wilt	215513	4552

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LEYDIG VOIT & MAYER, LTD
TWO PRUDENTIAL PLAZA, SUITE 4900
180 NORTH STETSON AVENUE
CHICAGO, IL 60601-6780

EXAMINER

MONESTIME, MACKLY

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 10/06/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/074,201

Applicant(s)

WILT, NICHOLAS P.

Examiner

Mackly Monestime

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-14 is/are rejected.
- 7) ☒ Claim(s) 7-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-14 are presented for examination.

Specification

2. It is noted that although the present application does not contain line numbers in the specifications and claims, the line numbers in the claim do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the examiner and Applicant all future correspondence should include the recommended line numbering.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art.

5. As per claims 1, 5-6 and 9, AAPA disclosed the invention as claimed included a method for a display source to regulate a rate of production by the display source of information for display on a display device (Fig. 1A; Items No. 106, 102), the display source associated with a

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display memory set, the display device associated with a presentation surface set distinct from the display memory surface set (Fig. 1A; Items No. 106, 102, 104) the method comprising: receiving notification of an estimated time when a future frame will be displayed on the display device, preparing display information in the display memory surface associated with the display source, the preparing based on the estimated time, and releasing the display information for display on the display device (Fig. 1B; Items No. 106, 110, 102; page 7, lines 17-29).

6. As per claim 2, AAPA disclosed that the display source is in the set: application program, driver, and operating system (Fig. 1E, page 7, lines 7-8; page 8, lines 26-28).

7. As per claims 3-4, AAPA disclosed preparing display information comprises preparing display information in a back buffer in a flipping chain of the display memory surface set associated with the display source and wherein releasing comprises making the back buffer into a ready buffer in the flipping chain of the display memory surface set (Fig. 1D; Items No. 110, 112, 114 and 116).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claim 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Cunniff et al (US Patent No. 6,476,806).

10. As per claims 10 and 14, AAPA substantially disclosed the invention as claimed, including a method for a display source to regulate a rate of production by the display source of information for display on a display device (Fig. 1A; Items No. 106, 102), the display source associated with a display memory set, the display device associated with a presentation surface set distinct from the display memory surface set (Fig. 1A; Items No. 106, 102, 104) the method comprising: receiving notification of an estimated time when a future frame will be displayed on the display device (Fig. 1B; Items No. 106, 110, 102; page 7, lines 17-29).

AAPA did not disclose if at least a portion of the display information will not be occluded, then preparing non-occluded portions of the display information in the display memory surface set associated with the display source, and releasing the display information. However, Cunniff et al disclosed a method and apparatus for performing occlusion testing in a computer graphics display system wherein the method having logic to configure to calculate whether or not an object is occluded; if a determination is made that the object was not occluded in the previous image frame, then the logic causes the object of the current image frame to be rendered to a frame buffer of the computer graphics display system (col. 2, lines 60-64). It would have obvious to one of ordinary skill in the art at the time the invention was made to combined the cited references because doing so would provide an occlusion technique which reduces the overall number of pixels that must be rasterized by reducing the number of false positive visibility results.

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11. As per claim 11, AAPA disclosed that the display source is in the set: application program, driver, and operating system (Fig. 1E, page 7, lines 7-8; page 8, lines 26-28).

12. As per claim 12-13, AAPA disclosed preparing display information comprises preparing display information in a back buffer in a flipping chain of the display memory surface set associated with the display source and wherein releasing comprises making the back buffer into a ready buffer in the flipping chain of the display memory surface set (Fig. 1D; Items No. 110, 112, 114 and 116).

Allowable Subject Matter

13. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The prior art of record further failed to teach or disclose either singularly or in combination a method for a display source to provide information for display on a display device; wherein the method further comprises the steps of: "receiving notification of a time when a frame was displayed on the display device, the frame containing at least a portion of the released display information; comparing the received estimated time to the received display time; and if the received display time is later than the received estimated time, then taking corrective action" (as per claim 7). These distinct steps of the present claims invention were not found to be anticipated, suggested or made obvious by the prior art of record.

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Conclusion

The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure.

Cahill III (US Patent No. 5,583,536) taught a method and apparatus for analog video merging and key detection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mackly Monestime whose telephone number is (703) 305-3855. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew, can be reached on (703) 308-6829.

Any response to this action should be mailed to:

Commissioner of Patent and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Va, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Mackly Monestime

Patent Examiner

September 25, 2003

Matthew C. Bella

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600